

ABSTRACT

5 The invention discloses a MRAM (Magnetoresistive RAM) based on vertical current writing and
its control method, the operation of information writing in the MRAM unit is completed by the
corporate effect of the magnetic field generated by the current parallel to the MFC unit and the
other current vertical to the MFC unit and passing through this unit. The advantage of such
structure is: eliminating a word line (WL) of the prior art especially for information writing,
10 reducing the number of the metal wiring layers and the contact holes, and reducing the
complexity of MRAM's structure, and difficulty and cost of manufacturing process.

(Figure 2)